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Leave No Trace!

LAND ETHICS

Prepared by: USDA Forest Service

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America's Great Outdoors

LAND ETHICS

More and more people are taking to trails to discover America. On foot or horseback, on mountain bikes or with a llama, there are vast expanses to be explored in National Forests, National Parks, and on lands administered by the Bureau of Land Management. This trend is not without some problems. Many popular areas are already overcrowded with evidence of people, horses, tents, and campfires everywhere.

Back-country areas are places to seek solitude and a "wilderness experience" away from crowds, noise, and daily pressures of urban life. This escape should be accompanied by a commitment to protect and preserve these areas. **Leave No Trace!** practices are techniques that visitors can use to help reduce evidence of their presence in the back country. By following the NO TRACE land ethics, visitors can enjoy back country and Wilderness areas Congressionally designated under the Wilderness Act of 1964, while preserving the beauty and solitude.

ETHICS

NO TRACE guidelines help protect the land and lessen the sights and sounds of your visit.

Because most visitors do not live in the out-of-doors all the time, they unknowingly violate the **Leave No Trace!** ethic by:

- Traveling and camping in large groups.

- Traveling off trails or roads, causing scars, trampling vegetation and causing soil erosion.
- Leaving campfire scars.
- Leaving human waste and garbage at a campsite.
- Polluting lakes and streams.
- Making loud noises which disturb wildlife and other visitors.
- Taking brightly colored outdoor gear and clothes that make them visible to others in the area (exception: for rescue, have a "Dayglo" vest or similar items in your pack).

PLANNING

Lots of planning must go into a back country trip if it is to be safe and fun. Gathering information from National Forest, Bureau of Land Management and National Park offices can help. They can provide current maps, first-hand information on trails and campsites, and anything else pertinent to the anticipated trip. Planning should consider the group size, when and where to go, equipment, and food selection.

GROUP SIZE: Small groups are ideal in open areas such as deserts, meadows and above timberline. Plan on traveling and camping with less than 8-10 people which can be divided into hiking groups of 2-4 during the day. It also is easier to plan for small groups and to keep them together. Campsites for smaller groups are easier to find and they harmonize better with the environment. Check ahead to see if there is a group size limitation in the area you plan to visit.

WHEN AND WHERE TO GO: To find maximum solitude, avoid back country trips on holidays and even some weekends. Since many popular trails and Wildernesses always seem to be crowded, visit less popular areas. Plan such trips for the spring or fall, or even the winter.

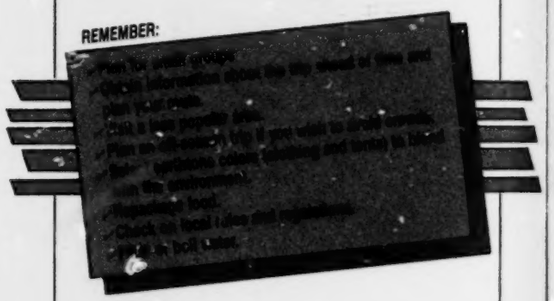
WHAT'S NEEDED AND WHAT'S NOT: Bright colored clothing, packs and tents should be avoided as they can be seen for long distances and contribute to a crowded feeling. Consider choosing earth-tone colors to lessen the visual impact.

Plan to carry a lightweight backpacking stove for all cooking. Be sure to inquire locally about open fire restrictions since some areas are closed due to the potential for wildfires or the scarcity of fuel.

Lighten your pack by repacking the food and removing glass and aluminum packing. They do not burn and add extra weight. Check for local restrictions prohibiting cans and bottles. IF YOU PACK IT IN, YOU SHOULD PACK IT OUT. Carry extra trash bags for litter pickup in and around your campsite. They also make great emergency rain gear.

Other suggested equipment is a small trowel or plastic garden shovel for burying human waste and for digging **Leave No Trace!** fire pits. Leave the axe and saw at home, unless you are traveling by horse and need them to cut a trail. Firewood that cannot be broken by hand should be left as part of the natural system.

BE PREPARED: Obtain a good map, plan your route, and leave your itinerary with someone at home, so that others do not have to search for you. Know what weather conditions to expect in that area at that time of year and come prepared for the extreme temperature, wind, snow and rain you might be exposed to. A day hike requires minimal survival gear: extra food, a signal mirror, whistle, and warm clothing. A highly visible vest ("Dayglo" orange or red) should be included in your pack for rescue in the event you become lost. Carry extra water in desert areas (minimum of two quarts per day per person).



TRAVEL

Trails are an important part of back-country travel. They are

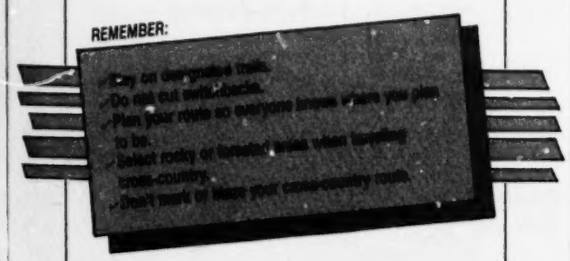
designed to get people from one place to another with varying degrees of difficulty. Trails are also designed to drain off water with a minimum amount of soil erosion. Make an effort to stay on the trails no matter how you are traveling.

Switchbacks are the most abused portion of the trail system. A switchback is a reversal in trail direction. Many people shortcut switchbacks and create new trails trying to save time and energy. Cutting switchbacks creates a new scar on the hillside which will cause soil erosion and scarring.

CROSS-COUNTRY: Hiking or riding horses cross-country, off established trails, is ok but remember to stay spread out and off "social trails" that other users have begun. Avoid traveling through meadows and wet areas as they are fragile and will show the impact of foot or hoot prints and group travel much longer than forested and rocky areas.

Bicycles and motorized vehicles are allowed in some back-country areas but not in Wilderness. To ride them cross-country will create social trails and cause erosion.

The feeling of solitude or adventure is broken when you see ribbons, signs, or even blazed trees that visitors have left to mark a path. Always discuss the planned route with your group members to avoid leaving these markers. If you must mark a route, remove markers upon departure.



CAMPING

Choose a campsite away from popular places for more solitude and privacy. Try to camp 200 feet or more from lakes, streams, meadows, and trails when you have a choice as there will be less chance of damage to fragile areas.

Where campsites in your selected locality are designated, or there are already well-established sites, use them. This will concentrate impacts in already disturbed places. Try to confine most activities to areas of the site that are already bare.

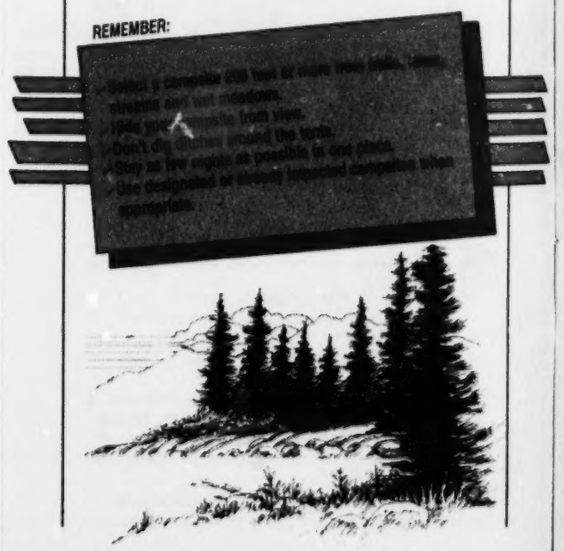
When camping in pristine places, disperse your activities and use extra care. Space the tents, kitchen and latrine, and

try to avoid repeated traffic over any area. Before leaving camp, naturalize the area by replacing rocks and scattering leaves and twigs around the site.

The best campsites are generally found on ridges, hills or near canyon walls. These areas provide natural drainage so your camp will not flood. To hide it from view, arrange your campsite around trees, rocks, and shrubs. Beware of hazard trees, avalanche areas, potential hazards from falling rocks, or flash flood sites.

Never ditch or build trenches around your tent as they can start soil erosion and create lasting scars. Limit your stay to as few nights as possible to avoid waste accumulation and injury to plants. One night in each campsite is best and will make it easier to **Leave No Trace!** of your visit when you depart.

REMEMBER:



FIRES

Practice **Leave No Trace!** ethics by cooking on a stove and avoid building campfires. Today's backpacking stoves are economical and lightweight and provide fast, clean cooking. In some heavily used areas, fires are not permitted. In fragile environments, such as deserts and alpine meadows, fire leaves scars for many years and depletes wood supplies. Ask at the local Ranger Station or District Office about fire restrictions or closures and whether a campfire permit is required in the area you plan to visit.

HEAVY USE AREAS: If you are camping in a heavy-use area, there are probably some existing campfire rings nearby that are maintained for this use. Use them to concentrate the use to one area and lessen the overall impact.

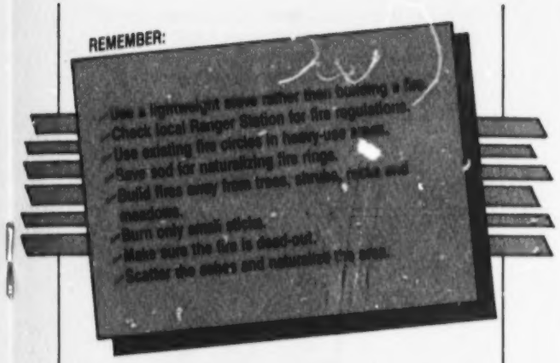
REMOTE AREAS: When camping in remote areas, you may choose to build a campfire making sure the site is away from trees and shrubs. Campfires are best built on a sandy spot or hard ground since the scar can easily be hidden there. Never build a fire next to a rock because smoke will blacken it. Wildfire can easily start from campfires built on forest duff or peat.

With your trowel, dig up the organic layer of soil and set it aside for later use. Avoid encircling the fire with rocks. There is a misconception that the rocks will keep a fire from spreading. Actually, the rocks may explode from intense heat and the blackened rocks are hard to conceal.

WOOD: Burning small sticks gathered from the ground is the best source of wood. Use only down, dead wood. Never cut green trees or branches; they won't burn. Standing dead trees will burn but are valuable for cavity nesting birds and aesthetics, so leave them alone. Small wood will burn completely, providing good coals for cooking. The remaining white ash is easier to dispose of than partially burned logs. Remember, never leave a fire unattended.

LEAVE NO TRACE!: In heavily used camping areas, some fire rings are maintained and should be used. Make sure your fire is dead-out before you pick out trash that did not burn. To verify that the fire is out, sprinkle it with water and stir the coals. If the coals are cold to the touch, the fire is out. The remaining ash and coals should be carried several hundred feet from the campsite and widely scattered. After picking up the trash to carry home, your campsite area is ready for the next visitor. A last minute check of your site for cigarette butts or gum wrappers, etc., will help assure that you **Leave No Trace!**

In remote areas, follow the same procedures and then replace the organic material you set aside earlier. Be sure to completely naturalize the area. If you think all this is a bother, difficult, and dirty—it is! Cooking on a stove eliminates these problems.


REMEMBER:
-Use a lightweight stove rather than building a fire.
-Check local Ranger Station for fire regulations.
-Use existing fire circles in heavy-use areas.
-Save sod for naturalizing fire rings.
-Build fires away from trees, shrubs, rocks and meadows.
-Burn only small sticks.
-Make sure the fire is dead-out.
-Scatter the ashes and naturalize the area.

SANITATION

Sanitation practices in the back country require extra effort. Washing and the disposal of human waste must be done carefully so the environment is not polluted and fish and aquatic life are not injured. Water can become polluted from the run-off of soaps, food waste and human waste. Toilet paper and other trash also leave an unsightly impact.

WATER AND WASHING: There are Giardia bacteria and other contaminants in many streams, springs and water sources, so plan to filter or boil all drinking water. Wash at least 50 feet away from camp and any water sources. For personal washing, use a container and rinse away from water sources. For kitchen waste, scrape burnable food scraps into the campfire or put it in a plastic bag to be carried out and then wash dishes away from water sources. Use small amounts of biodegradable soap. No soap would be better since any soap can pollute lakes and streams. Pour wash water on the ground at least 50 feet from water sources and the kitchen area.

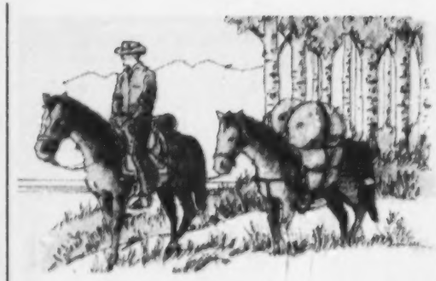
HUMAN WASTE: Use the "cat method" of making a shallow hole and covering when done. It should be dug in the top 6-8 inches of organic soil and be at least 200 feet away from camp, trails and water sources. Groups may need to walk well over 200 feet to assure catholes are scattered during their stay at that site.

Latrines concentrate impacts and should be used only outside Wilderness when large groups are staying for a long time in popular areas. Locate the latrines at least 200 feet away from camp, trails and water sources. Dig a hole at least 12 inches deep, add soil after each use and fill in once it is within 4 inches of being full.

TRASH: If your back-country trip has been well planned, there should not be too much trash. Never bury your trash because animals will probably dig it up. While you're hiking, make an effort to pocket all trash, including cigarette butts, and then empty your pockets into a trash bag later. Remember that peanut shells, orange peels, and egg shells are trash. If you packed it in, you can certainly pack it out.

REMEMBER:

- Do all washing away from camp and water sources.
- Dig cat holes 200 feet or more from camp, trails, and streams.
- Burn food scraps completely in the fire or put them in a plastic bag and carry them out.
- Pack it in. Pack it out.
- Obtain special guidelines for Grizzly Bear country.



PACK ANIMALS

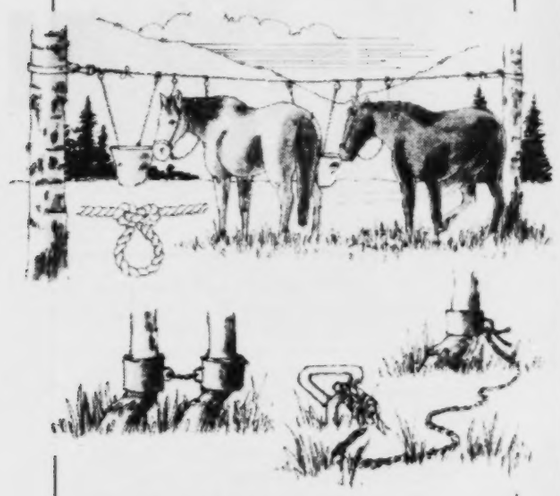
Many people enjoy animal packing in back-country areas where permitted. Pack stock groups must be even more conscientious about **Leaving No Trace!** than backpackers since animals tend to produce greater impact than backpack use. Proper planning, with special attention to camp location and confining animals in camp, is needed.

PLANNING: Extensive planning must go into a pack stock trip. Check with the local office of the administering federal agency for trail conditions and whether stock is allowed. Some areas are closed to pack animals due to overuse, or because the environments are fragile. The fewer animals taken, the less impact on the land. Keeping groups small and carrying lightweight equipment will help reduce the number of animals needed.

SETTING UP CAMP: When selecting a campsite, first consider your stock. The campsite should be able to accommodate your animals without any damage to the area. As you ride into a potential campsite, look it over and decide whether there is enough feed. In addition to feed requirements, give some thought to wildlife. If the area is overgrazed, your stock may remove feed otherwise needed by deer and elk during winter months. Also, consider where your stock can be watered. Pick a place with a streambank that can withstand hard use and that is downstream from camp. Loose herding for watering causes substantial streambank damage. Avoid lakeshores and soft meadows.

ANIMAL CONFINEMENT: Hitchlines, hobbles, and staking are ways to confine pack animals. Hitchlines need to be erected in rocky areas and on good stout trees. Protect bark by using straps or other devices such as "tree savers." Let stock graze freely, using hobbles if they need to be constrained. Picket with metal pins only enough stock to keep others from straying. Stakes or picket pins should be moved every few hours to prevent overgrazing.

Animals should be returned to a hitchline overnight. Temporary corrals are an excellent method of containing pack animals for several days but should be moved twice daily. They can be built with rope or portable electric fence.



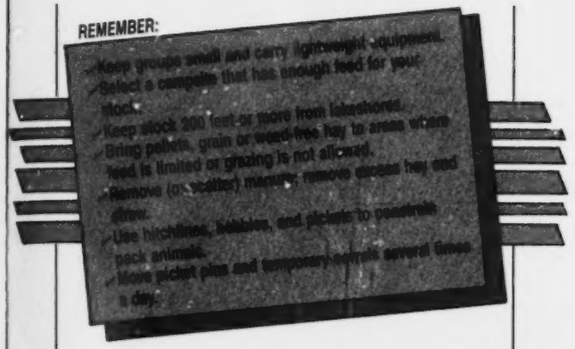
FEED: Feeding pack animals can cause an impact too. Spreading loose hay on the ground may introduce exotic plant species to an area. Instead, pack in a good supply of processed feed for your animals. This will give them a supply of food and prevent overgrazing around camp. Check local regulations, since some areas require certified weed-free hay and grain.

Plan to take enough feed, where stock are allowed but grazing is not. Grazing is not allowed in some Wildernesses and National Parks.

BREAKING CAMP: It takes extra time to naturalize an area that has been impacted by pack animals. Scatter manure piles to aid decomposition, discourage flies, and as a courtesy to other users. Fill areas dug up by animal hooves. Remove excess hay and straw; it does not deteriorate and leaves an unsightly mess.

HISTORICAL AND ARCHEOLOGICAL SITES

Many historical and archeological sites are found throughout National Parks, Bureau of Land Management areas, and on National Forests. You are invited to enjoy and learn from these remnants of the past. Visitors to these sites can help preserve them for the next generation by not disturbing them in any way. Federal law prohibits disturbing historical and archeological sites, or removing any objects. Do not camp in or near these special features. Camping too near the resources can disturb valuable archeologic information that can never be reclaimed.


REMEMBER:
✓Keep groups small and carry lightweight equipment.
✓Select a campsite that has enough feed for your stock.
✓Keep stock 200 feet or more from lakeshores.
✓Bring pellets, grain or weed-free hay to areas where feed is limited or grazing is not allowed.
✓Remove (or scatter) manure; remove excess hay and straw.
✓Use hitchlines, hobbles, and picket to penetrate pack animals.
✓Move picket pins and temporary corrals several times a day.

BACK-COUNTRY COURTESY

One of the most important components of back-country ethics is to maintain courtesy toward others. It helps everyone enjoy their outdoor experience. Incompatible or competing activities must share limited facilities and areas. Excessive noise, unleashed pets, and damaged surroundings distract from a quality experience in the back country.

Keep the noise level down while traveling on trails. Radios and tape players do not belong in the back country. If your group meets another group, give uphill hikers the right-of-way. When you encounter groups leading or riding livestock, you should step off the trail on the lower side and let them pass. Stand quietly since some horses are spooked easily.

Keep pets under control at all times. No one wants someone's pets running through the area and frightening people and wildlife. Some Wildernesses prohibit dogs or require them to be on a leash at all times.

Wildflowers, picturesque trees, and unusual rock formations all contribute to the back-country beauty we came to enjoy. Picking flowers, hacking trees, and chipping rocks disturb the natural ecosystem. Please leave them alone and protect them for others to enjoy. Take nothing but pictures . . . leave with only fond memories.

This publication was produced, in partnership, with the DuPont Company, producers of man-made fibers used in outdoor apparel and sleeping bags.

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